U.S.S.N. 10/713,472
Filed: November 14, 2003
RESPONSE TO NOTICE OF NON-COMPLIANT AMENDMENT

IN THE SPECIFICATION

Please replace the title as filed with:

"Population of Undifferentiated Neuroendocrine Cells".

Please 1, please substitute the paragraph inserted in the Preliminary Amendment at page 1, line 4, with the following paragraph:

This application is a continuation of U.S.S.N. 09/658,912 filed on September 11, 2000, which is a continuation of U.S.S.N. 09/200,033 filed on November 25, 1998.

Please delete Figures 2-5.

Page 11, please delete lines 15-25, as follows:

~~[0037] FIG. 2 is a photograph of a permeable, polymeric support structure in the shape of a rat femur.~~

~~[0038] FIG. 3 is a photograph of a nude mouse in which the support structure of FIG. 2 has been implanted subcutaneously.~~

~~[0039] FIG. 4 is a photograph of the support structure of FIG. 2 after it has been injected with a hydrogel cell composition containing periosteal cells and subsequently removed from the mouse shown in FIG. 3.~~

~~[0040] FIG. 5 is a photograph showing the histology of the support structure of FIG. 4.~~

———Please replace the paragraphs relating to Figures 2 and 3 at page 41, line 24 to page 42, line 16, as follows (marked paragraph followed by clean version):

[0146] Polyglycolic acid fibers, 14 microns in diameter, were entangled into a mesh in which the fibers are space from one another by an average of 150-250 microns. The fiber mesh was then immersed in a 1% solution of polylactic acid for about 10 seconds, when it became saturated.

The solution, which has a viscosity similar to water, coated the fibers and welded the fibers to one another where the fibers intersected one another. While the fiber mesh was still wet with the polylactic acid solution, it was compressed in the mold and allowed to dry for several minutes. Once the solution evaporated and the polylactic acid dried, the fiber mesh retained the shape of the mold. The procedure took place at room temperature and produced a support structure in the shape of the distal femur with holes or pores approximately 200 microns in diameter. The femur itself was approximately 15 mm long and between 3-7 mm in diameter. ~~FIG. 2 is a photograph of the femur support structure~~.

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[0147] The support structure was then implanted subcutaneously onto the back of a nude mouse. ~~FIG. 3 shows~~ a photograph of the nude mouse after the support structure was implanted. ~~The photograph~~ clearly shows the definition of the femur-shaped support structure through the skin of the mouse. A hydrogel-cell composition containing periosteal cells was then injected into the structural support.

[0147] The support structure was then implanted subcutaneously onto the back of a nude mouse. A photograph of the nude mouse after the support structure was implanted clearly shows the definition of the femur-shaped support structure through the skin of the mouse. A hydrogel-cell composition containing periosteal cells was then injected into the structural support.

Please replace the paragraph at page 43, lines 9-22, to delete the reference to Figures 4 and 5 as follows (marked paragraph followed by clean version):

[0150] After 8 weeks, the mouse was sacrificed and the femur-shaped support structure was removed for examination. ~~As shown in the photograph in FIG. 4,~~ new tissue engrafted to the support structure. Histological examination of the support structure~~, as shown in the photograph in FIG. 5,~~ indicated new tissue growth and vascularization as indicated by the appearance of a Haversian system in the new bone. In particular, ~~FIG. 5~~ histology shows a portion of the new tissue in which bone cells ~~(shown in light)~~ surround a blood vessel ~~(shown in dark)~~ at the center of the photograph. Additional bone cells filled the entire support structure~~. The photograph was taken~~ as observed through a 20x microscope objective ~~and the photograph correspond~~ in an area corresponding to a 640 micron by 950 micron cross-sectional area.

[0150] After 8 weeks, the mouse was sacrificed and the femur-shaped support structure was removed for examination. New tissue engrafted to the support structure. Histological examination of the support structure indicated new tissue growth and vascularization as indicated by the appearance of a Haversian system in the new bone. In particular, histology shows a portion of the new tissue in which bone cells surround a blood vessel at the center of the photograph. Additional bone cells filled the entire support structure as observed through a 20x microscope objective in an area corresponding to a 640 micron by 950 micron cross-sectional area.